

SEQUENCE LISTING

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<120> METHODS AND COMPOUNDS FOR MODULATING NUCLEAR RECEPTOR
COACTIVATOR BINDING

<130> UCAL-253/02US

<140> 09/281,717

<141> 1999-03-30

<150> US 60/079,956

<151> 1998-03-30

<160> 51

<170> PatentIn Ver. 2.1

<210> 1

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<213> Homo sapiens

<220>

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<222> (2)..(3)

<223> Xaa = Any Amino Acid

<400> 1

Leu Xaa Xaa Leu Leu

1

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<400> 2
Ile Leu Xaa Xaa Leu Leu
1 5

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<213> Homo sapiens

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<400> 3
Phe Xaa Xaa Leu Trp
1 5

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<223> Xaa = Any Amino Acid

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Phe Xaa Xaa Ala Leu
1 5

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Ala Glu Gly His Ser Arg Leu His Asp Ser Lys Gly Gln Thr Lys Leu
1 5 10 15

Leu Gln Leu Leu Thr Thr Lys Ser Glu Gln Met Glu Pro Ser Pro Leu

Ala Ser

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<222> (15)
<223> Ile --> Ala

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<222> (16)
<223> Leu --> Ala

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<223> Leu --> Ala

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<223> Leu --> Ala

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<223> HisArg --> AlaAla

<220>
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<222> (19)..(20)
<223> LeuLeu --> AlaAla

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<223> Ile --> Phe

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<223> Leu --> Phe

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<400> 6
Pro Gly Ser Thr His Gly Thr Ser Leu Lys Glu Lys His Lys Ile Leu
1 5 10 15

His Arg Leu Leu Gln Asp Ser Ser Ser Pro Val Asp Leu Ala Lys Leu
20 25 30

Thr Ala

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<213> Homo sapiens

<400> 7
Glu Pro Ala Ser Pro Lys Lys Lys Glu Asn Ala Leu Leu Arg Tyr Leu
1 5 10 15

Leu Asp Lys Asp Asp Thr Lys Asp Ile Gly Leu Pro Glu Ile Thr
20 25 30

<210> 8

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<213> Homo sapiens

<400> 8
Ala Asp Gly Gln Ser Arg Leu His Asp Ser Lys Gly Gln Thr Lys Leu
1 5 10 15
Leu Gln Leu Leu Thr Thr Lys Ser Glu Gln Met Glu Pro Ser Pro Leu
20 25 30
Ala Ser

<210> 9
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<400> 9
Ser Gly Ser Thr His Gly Thr Ser Leu Lys Glu Lys His Lys Ile Leu
1 5 10 15
His Arg Leu Leu Gln Asp Ser Ser Ser Pro Val Asp Leu Ala Lys Leu
20 25 30
Thr Ala

<210> 10
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<400> 10
Glu Pro Val Ser Pro Lys Lys Lys Glu Asn Ala Leu Leu Arg Tyr Leu
1 5 10 15
Leu Asp Lys Asp Asp Thr Lys Asp Ile Gly Leu Pro Glu Ile Thr
20 25 30

<210> 11
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<213> Homo sapiens

<400> 11

Ala Glu Gly His Ser Arg Leu His Asp Ser Lys Gly Gln Thr Lys Leu
1 5 10 15

Leu Gln Leu Leu Thr Thr Lys Ser Glu Gln Met Glu Pro Ser Pro Leu
20 25 30

Pro Ser

<210> 12

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<213> Homo sapiens

<400> 12

Pro Gly Ser Thr His Gly Thr Ser Leu Lys Glu Lys His Lys Ile Leu
1 5 10 15

His Arg Leu Leu Gln Asp Ser Ser Ser Pro Val Asp Leu Ala Lys Leu
20 25 30

Thr Ala

<210> 13

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<212> PRT

<213> Homo sapiens

<400> 13

Glu Pro Ala Ser Pro Lys Lys Lys Glu Asn Ala Leu Leu Arg Tyr Leu
1 5 10 15

Leu Asp Lys Asp Asp Thr Lys Asp Ile Gly Leu Pro Ser Ile Thr
20 25 30

<210> 14

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<213> Homo sapiens

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Ala Glu Asn Gln Arg Gly Pro Leu Glu Ser Lys Gly His Lys Lys Leu

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Leu Gln Leu Leu Thr Cys Ser Ser Glu Asp Arg Gly His Ser Ser Leu			
20	25	30	

Thr Asn

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<400> 15
Thr Ser Asn Met His Gly Ser Leu Leu Gln Glu Lys His Arg Ile Leu
1 5 10 15

His Lys Leu Leu Gln Asn Gly Asn Ser Pro Ala Glu Val Ala Lys Ile
20 25 30

Thr Ala

<210> 16
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<400> 16
Glu Gln Leu Ser Pro Lys Lys Lys Glu Asn Asn Ala Leu Leu Arg Tyr
1 5 10 15

Leu Leu Asp Arg Asp Asp Pro Ser Asp Val Leu Ala Lys Lys Leu Gln
20 25 30

<210> 17
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<400> 17
Ala Glu Asn Gln Arg Gly Pro Leu Glu Ser Lys Gly His Lys Lys Leu

1	5	10	15
Leu Gln Leu Leu Thr Cys Ser Ser Asp Asp Arg Gly His Ser Ser Leu			
20	25	30	

Thr Asn

<210> 18
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<400> 18
Thr Ser Asn Met His Gly Ser Leu Leu Gln Glu Lys His Arg Ile Leu
1 5 10 15

His Lys Leu Leu Gln Asn Gly Asn Ser Pro Ala Glu Val Ala Lys Ile
20 25 30

Thr Ala

<210> 19
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 <213> Homo sapiens

<400> 19
Glu Gln Leu Ser Pro Lys Lys Lys Glu Asn Asn Ala Leu Leu Arg Tyr
1 5 10 15

Leu Leu Asp Arg Asp Asp Pro Ser Asp Ala Leu Ser Lys Glu Leu Gln
20 25 30

<210> 20
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<400> 20
Ser Glu Thr Pro Arg Gly Pro Leu Glu Ser Lys Gly His Lys Lys Leu

1	5	10	15
Leu Gln Leu Leu Thr Cys Ser Ser Glu Asp Arg Gly His Ser Ser Leu			
20	25	30	

Thr Asn

<210> 21
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<400> 21			
Thr Ser Asn Val His Gly Ser Leu Leu Gln Glu Lys His Arg Ile Leu			
1	5	10	15

His Lys Leu Leu Gln Asn Gly Asn Ser Pro Ala Glu Val Ala Lys Ile		
20	25	30

Thr Ala

<210> 22
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<400> 22		
Glu Gln Leu Ser Pro Lys Lys Lys Glu Asn Asn Ala Leu Leu Arg Tyr		
1	5	10

Leu Leu Asp Arg Asp Asp Pro Ser Asp Ala Leu Ser Lys Glu Leu Gln		
20	25	30

<210> 23
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<400> 23		
Ser Glu Gly Asp Ser Lys Tyr Ser Gln Thr Ser His Lys Leu Val Gln		

1	5	10	15												
Leu	Leu	Thr	Thr	Thr	Ala	Glu	Gln	Gln	Leu	Arg	His	Ala	Asp	Ile	Asp
			20					25					30		

<210> 24
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<400> 24															
Thr	Cys	Pro	Ser	Ser	His	Ser	Ser	Leu	Thr	Glu	Arg	His	Lys	Ile	Leu
1				5					10					15	
His	Arg	Leu	Leu	Gln	Glu	Gly	Ser	Pro	Ser	Asp	Ile	Thr	Thr	Leu	Ser
			20					25						30	

Val

<210> 25
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<400> 25															
Glu	Leu	Asp	Ala	Ala	Lys	Lys	Lys	Glu	Ser	Lys	Asp	His	Gln	Leu	Leu
1				5					10					15	
Arg	Tyr	Leu	Leu	Asp	Lys	Asp	Glu	Lys	Asp	Leu	Arg	Ser	Thr	Pro	Asn
			20					25						30	

Leu Cys

<210> 26
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<222> (1)
<223> Xaa = Any Amino Acid

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<222> (2)
<223> Xaa = Any Negatively Charged Amino Acid

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<222> (3)..(9)
<223> Xaa = Any Amino Acid

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<222> (25)
<223> Xaa = Any Negatively Charged Amino Acid

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<222> (26)..(34)
<223> Xaa = Any Amino Acid

<400> 26
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Xaa Xaa Xaa Xaa Lys Leu
  1                   5                   10                   15

Xaa Gln Leu Leu Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
  20                   25                   30

Xaa Xaa

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<210> 27
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 <222> (25)..(32)
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 <222> (33)
 <223> Xaa = Any Hydrophobic Amino Acid

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<400> 28
 Glu Xaa Xaa Xaa Xaa Lys Lys Lys Glu Xaa Xaa Xaa Xaa Xaa Leu Leu
 1 5 10 15
 Arg Tyr Leu Leu Asp Xaa Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa

<210> 29
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 29
 Thr Ser Leu Lys Glu Lys His Lys Leu Leu Arg Tyr Leu Leu Gln Asp
 1 5 10 15
 Ser Ser

<210> 30
 <211> 33
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<213> Homo sapiens

<220>

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<222> (5)

<223> Thr --> Arg (T281R)

<220>

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<222> (8)

<223> Val --> Arg (V284R)

<220>

<221> MUTAGEN

<222> (9)

<223> Asp --> Ala (D285A)

<220>

<221> MUTAGEN

<222> (12)

<223> Lys --> Ala (K288A)

<220>

<221> MUTAGEN

<222> (22)

<223> Cys --> Arg (C298R)

<220>

<221> MUTAGEN

<222> (26)

<223> Ile --> Arg (I302R)

<220>

<221> MUTAGEN

<222> (30)

<223> Lys --> Ala (K306A)

<400> 30

Thr Pro Ala Ile Thr Arg Val Val Asp Phe Ala Lys Lys Leu Pro Met
1 5 10 15

Phe Cys Glu Leu Pro Cys Glu Asp Gln Ile Ile Leu Leu Lys Gly Cys
20 25 30

Cys

<210> 31
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<223> Leu --> Arg (L456R)

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<222> (8)
<223> Glu --> Lys (E457K)

<400> 31
Leu Phe Pro Pro Leu Phe Leu Glu Val Phe Glu Asp
1 5 10

<210> 32
<211> 33
<212> PRT
<213> Homo sapiens

<400> 32
Thr Pro Ala Ile Thr Arg Val Val Asp Phe Ala Lys Lys Leu Pro Met
1 5 10 15

Phe Ser Glu Leu Pro Cys Glu Asp Gln Ile Ile Leu Leu Lys Gly Cys
20 25 30

Cys

<210> 33
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<213> Homo sapiens

<400> 33
Leu Phe Pro Pro Leu Phe Leu Glu Val Phe Glu Asp

1 5 10

<210> 34
<211> 33
<212> PRT
<213> Homo sapiens

<400> 34
Thr Lys Cys Ile Ile Lys Ile Val Glu Phe Ala Lys Arg Leu Pro Gly
1 5 10 15
Phe Thr Gly Leu Ser Ile Ala Asp Gln Ile Thr Leu Leu Lys Ala Ala
20 25 30

Cys

<210> 35
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<213> Homo sapiens

<400> 35
Leu Phe Pro Pro Leu Phe Leu Glu Val Phe Glu Asp
1 5 10

<210> 36
<211> 33
<212> PRT
<213> Homo sapiens

<400> 36
Asp Lys Gln Leu Phe Thr Leu Val Glu Trp Ala Lys Arg Ile Pro His
1 5 10 15

Phe Ser Glu Leu Pro Leu Asp Asp Gln Val Ile Leu Leu Lys Ala Gly
20 25 30

Trp

<210> 37
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<400> 37

Pro Ile Asp Thr Phe Leu Met Glu Met Leu Glu Ala
1 5 10

<210> 38

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<212> PRT

<213> Homo sapiens

<400> 38

Val Glu Ala Val Gln Glu Ile Thr Glu Tyr Ala Lys Asn Ile Pro Gly
1 5 10 15

Phe Ile Asn Leu Asp Leu Asn Asp Gln Val Thr Leu Leu Lys Tyr Gly
20 25 30

Val

<210> 39

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<400> 39

Ser Leu His Pro Leu Leu Gln Glu Ile Tyr Lys Asp
1 5 10

<210> 40

<211> 33

<212> PRT

<213> Homo sapiens

<400> 40

Ser Tyr Ser Ile Gln Lys Val Ile Gly Phe Ala Lys Met Ile Pro Gly
1 5 10 15

Phe Arg Asp Leu Thr Ser Glu Asp Gln Ile Val Leu Leu Lys Ser Ser
20 25 30

Ala

<210> 41
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<400> 41
Lys Leu Thr Pro Leu Val Leu Glu Val Phe Gly Asn
1 5 10

<210> 42
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<222> (12)
<223> Lys --> Ala (K362A)

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<222> (26)
<223> Val --> Arg (V376R)

<400> 42
Asp Arg Glu Leu Val His Met Ile Asn Trp Ala Lys Arg Val Pro Gly
1 5 10 15

Phe Val Asp Leu Thr Leu His Asp Gln Val His Leu Leu Glu Cys Ala
20 25 30

Trp

<210> 43
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<220>
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<222> (8)
<223> Glu --> Lys (E542K)

<400> 43

Pro Leu Tyr Asp Leu Leu Leu Glu Met Leu Asp Ala
1 5 10

<210> 44

<211> 33

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<213> Homo sapiens

<400> 44

Gly Arg Gln Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro Gly
1 5 10 15

Phe Arg Asn Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr Ser
20 25 30

Trp

<210> 45

<211> 12

<212> PRT

<213> Homo sapiens

<400> 45

Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr Asn
1 5 10

<210> 46

<211> 33

<212> PRT

<213> Homo sapiens

<400> 46

Glu Arg Gln Leu Leu Ser Val Val Lys Trp Ser Lys Ser Leu Pro Gly
1 5 10 15

Phe Arg Asn Leu His Ile Asp Asp Gln Ile Thr Leu Ile Gln Tyr Ser
20 25 30

Trp

<210> 47

<211> 12

<212> PRT
<213> Homo sapiens

<400> 47
Glu Phe Pro Glu Met Met Ser Glu Val Ile Ala Ala
1 5 10

<210> 48
<211> 33
<212> PRT
<213> Homo sapiens

<400> 48
Gly Lys Gln Met Ile Gln Val Val Lys Trp Ala Lys Val Leu Pro Gly
1 5 10 15

Phe Lys Asn Leu Pro Leu Glu Asp Gln Ile Thr Leu Ile Gln Tyr Ser
20 25 30

Trp

<210> 49
<211> 12
<212> PRT
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<400> 49
Glu Phe Pro Ala Met Leu Val Glu Ile Ile Ser Asp
1 5 10

<210> 50
<211> 33
<212> PRT
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<400> 50
Glu Arg Gln Leu Val His Val Val Lys Trp Ala Lys Ala Leu Pro Gly
1 5 10 15

Phe Arg Asn Leu His Val Asp Asp Gln Met Ala Val Ile Gln Tyr Ser
20 25 30

Trp

<210> 51

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<400> 51

Asp Phe Pro Glu Met Met Ala Glu Ile Ile Ser Val

1

5

10